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ABSTRACT

The comments contained in this paper are excerpts from intensive interviews with 27 teachers in open area primary schools, asking their recommendations for architectural changes in future open area schools and in traditional type schools to accommodate open education techniques. They were also asked, "Would you like to see this school more open or less open?" The respondents are not represented as a typical group of teachers, but were chosen for their extreme attitudes for and against teaching in open area schools. All respondents were teaching in western Australian open area schools of a post-1968 design. The appendix contains floor plans and text describing school design developments in the region to 1972. (Author/MLF)

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AUSTRALIAN OPEN AREA SCHOOLS PROJECT

Technical Report No.2

TEACHERS' COMMENTS ON OPEN AREA AND CONVENTIONAL SCHOOL DESIGN

G.S. Fitzpatrick and T.L. Zani
Research Branch, Education Department
of Western Australia

1974

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INTRODUCTION

The comments contained in this paper are excerpts from intensive interviews conducted during 1973 with twenty-seven teachers in open area primary schools. Most comments are in response to three questions:

(1) If you could influence the design of future open area schools, what changes in architecture of the building would you recommend?

(2) What changes would you make to the architecture of a traditional type school to cater for open education techniques?

(3) Would you like to see this school more open or less open?

These questions are only three from a comprehensive interview schedule. The respondents are not represented as a typical group of teachers. They were chosen for their extreme attitudes for and against teaching in open area schools. All respondents were teaching in Western Australian open area schools of a post 1968 design.

The comments of these teachers may serve two purposes.

In the first place they provide a feed back to architects and school planners. In the second place they provide a source of ideas from teachers that ought to be considered closely. Ideas that emanate from experienced teachers have a certain face validity.

Dr. A.N. Stewart
PROJECT DIRECTOR

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A. IF YOU COULD INFLUENCE THE DESIGN OF FUTURE OPEN AREA SCHOOLS, WHAT CHANGES TO THE ARCHITECTURE OF THE BUILDING WOULD YOU RECOMMEND?

Ventilation

The air circulation is pretty poor in a classroom that is closed off. Consequently the concertina doors have to be open for this classroom to have adequate lighting and air circulation.

The low ceilings are very very hot in the summer time and very stuffy at all times because the ventilation is inadequate.

The temperatures during summer inside our class areas are worrying, to say the least. In some areas of this school where the windows face the direction of the sun, the temperature inside the rooms in summer time is absolutely stifling. It is definitely having a detrimental effect on my health.

I would like to see the ceilings lifted, or better over-head ventilation provided. There are quite dead areas in these rooms where the air doesn't seem to move. Some method is required to bring more air in and out of the building.

Attention should be paid to cross ventilation in some of the rooms.

The building gets extremely hot and it is not always possible to have the windows and doors open for the simple reason that everything gets blown away.

I would like to retain the three things we have here which seem essential: large open spaces, higher ceilings, and good cross ventilation.

The ventilation in this school is poor: it would make a good hot house for orchids in the summer time. There is no through ventilation. The open scuttles which are in each room to provide the ventilation don't serve the purpose. The continuation of the low ceiling throughout the whole building means that air has to move a great distance before it escapes and the need for some form of forced ventilation is very evident. These buildings have tinted glass walls which are hotter than normal glass. The entrance area to some of these classrooms, in the afternoons, is so hot that it is unbearable.

External Environment

I would like much wider footpaths around the school: it's quite a dangerous situation here at the moment with only two-slab footpaths.

Concerning sport: the Department builds elaborate schools here, but provide no sporting facilities.

The Department does not provide sporting facilities. They give you one small basketball court with no fence. In this school anyway, we're up on a high hill and the children run up and down on the banks: we're always on the kids backs to keep off the banks. The oval is still a sand pit and although it's been down for three years they haven't done one thing about upgrading it. The nearest oval is about two miles away. The Department does only half a job.

There was a swampy area between the school and the proposed playing field area which could have been used had we had access, but the swampy ground prevented this: I think that something should have been done with this area long before the school was finished.

In this particular school there is very little space where the children can play practical games, particularly those with balls. They have no wall and very little bitumen area against which they can bounce the ball: the bitumen area that is provided is not big enough for the number of children in the school. They cannot bounce balls or skip without going on to the car park and this is limiting their development in ball handling skills.

External, Wind Protected, Play, Work, Assembly Area

In the outside area there are no facilities for children where they can sit and eat their lunch: they eat in the classrooms. This makes supervision difficult because a lot of teachers will not supervise a class during their lunch time. I think that the children not only need a place to sit when it is wet but they need a place to sit when they want to be quiet; when they want to be out of the wind; when the girls want to play marbles.

Covered assembly areas which have walls, I feel, are essential.

We're on the top of a hill and it is very windy and sandy. The children are exposed to the elements all the time.

I think that the covered assembly area is an absolute essential right from the time the school is opened without waiting until it gets to the third cluster. It is essential right at the beginning to have shelter.

I think that between classrooms at least two of those classrooms should be opened up to make a large area. In our particular cluster school I would say that the dimensions of the covered assembly are inadequate for the number of children who would require it at a general assembly.

I think that the covered bitumen area immediately adjacent to our resource centre would be ideal if it was completely enclosed and possibly slightly larger. Ideally it should be fully enclosed with glass from at least four or five feet above the ground providing an ideal all weather almost outdoor type of area for folk dancing and assemblies.

I would like to see a sheltered courtyard off each classroom equipped with a water tray, a sand tray and even a little painting area. Where I am at the moment there is nowhere for the children to work outside without being exposed to the wind.

Closure of Teaching Areas

I would recommend that each area be able to be closed off at some time during the day. I feel that everybody, children as well as teachers, need some time during the day when they can work quietly. I don't agree that we should build great big barns: I think that is going back to the years in the early 1940's when teachers used to teach at each end of the hall.

Every teaching area needs to be closed off or have the facility to be closed off: for example, with concertina doors.

My room is open at one end which I find is rather cold. I feel there should be some door closing it off even if it is only a concertina door which can be opened readily.

I think we should be able to allow the classes to work separately on some occasions by pulling across a temporary wall. Right at the moment we are quite open and things are a little

chaotic with two hundred and twenty children all working at once. We could probably achieve more than we are doing now if classes could be separated occasionally.

I would like to see a building where, in place of the long linear stretch, the rooms were in pairs. This plan could facilitate teachers working in pairs and would eliminate those middle areas where teachers seem to be lost in the great open expanse.

I would say that every classroom should be able to be closed off because it is sometimes necessary to have just your own class enclosed within four walls. With six classrooms sharing the one withdrawal room it is not possible to find a quiet area in which to work.

I would also like the rooms to be a bit bigger.

I would have some type of partition-doors which were more sound-proof than the present concertina doors.

Storage Space

While the storage space in the open school is a great improvement on that in the linear school, it still needs to be greater. The shelving ought to be of a more suitable type. In addition I think the internal walls of the store rooms ought to be painted or smoothly finished. I am finding that a considerable amount of the fine sand just drops off the walls and on to the equipment. I have the duplicator on the bench in our store room and periodically have to clean the screen down because of the sand.

I don't feel that for teachers who have a great amount of equipment and books, and most teachers are in this situation, that the storage rooms are really adequate, particularly when they have got to be used for the storing of children's things for crafts and art as well.

There is no cupboard space for any sporting material. They give you a little poky storeroom with doors without locks: the children help themselves and you re all the time chasing after the material; nine times out of ten it is lost.

There is no room for your own reference material; if you put it outside on the little shelf near the wash basin, the kids come along and flick water all over it and you find your books all ruined.

Size of Classrooms

The rooms are very small; they should be made larger even if it means doing away with a little quiet area, which I rarely use anyway. I would like to see the quiet area incorporated in the general classroom.

I found that the class areas were too small to have all the children sitting down together working and that we had to be more flexible and have more activity learning; to use up our withdrawal areas, quiet areas and wet areas.

I think the classrooms are too small for the number of children. It has proved very awkward to move in and out of the classrooms, and to move chairs or desks out of the room is quite a noisy and awkward feat. This means that the classes have to be a good deal smaller.

Pin-up Space

The pin-up board space in our particular cluster school is negligible: I would definitely have more provision for this. All the wall space could be pin-up board for all I am concerned.

I would make sure there is far more pin-up space in the classroom. In the cluster schools at the moment, the pin-up board space is very limited and it is insufficient for the children to display their own work.

I find there is a tremendous lack of pin-up space. I have one pin-up board in my classroom and one in the quiet area and I still find I have to stick things on the painted walls.

The pin-up boards at the front of the room are about two feet from the floor: this is much too low to be useful. There is about another 12 inches of pin-up board above the blackboard and this is completely useless.

Withdrawal Space

The withdrawal room is just not big enough: it should be bigger. At the moment we can only fit one class in there. I think it should be able to comfortably fit two classes.

The withdrawal room is too small as it is. In this particular building I think it could be twice the size taking over the area that is now used by the boys' and girls' toilets.

I would make sure that the withdrawal room is far better ventilated: the ventilation is shocking, especially if you have two classes of children, or at a maximum, three classes in for a television show or films. It is almost impossible to breathe in there especially in hot weather.

Ceilings

I think the ceilings need to be much higher: possibly raised about eighteen inches. The construction of the ceiling needs to be improved. The 4' x 2' acoustic tiles are far too big and sometimes fall down. I have had two tiles land on my head; it is not a very nice sensation.

Cloaking

There wasn't sufficient room for each child to put a coat and a case into a particular area: consequently it was a bit untidy at times and some classes have to put cases and raincoats in the classroom itself.

Coat pegs should be coat hooks because the coats fall straight off the pegs. It is also very untidy for visitors to come in to the cluster and see coats and cases very untidily arranged. It would be better if coats and cases could be put in a less conspicuous place.

The coat racks on tracks I found were very dangerous. Children can push these off the tracks and they can squash each other between them. The racks don't hold the coats effectively and by the end of the day you have half your coats on the floor.

Quiet Areas

The quiet areas are far too small. At the moment they are being used as storerooms and cloakrooms. The builders have put in shelving and hooks. If these were removed there would

then be enough room to put in enough furniture to accommodate eight to ten kids. Pin-up boards could replace the shelving.

The little areas which are called quiet areas are not big enough.

Wet Areas

In our particular school the wet area, which is the utility area, is also a thoroughfare and the children are continually walking through the area. I would have the entrance relocated and the wet area closed off so that classes can work in there without being disturbed.

The wet areas or art areas should be big enough to accommodate 40 children which is the average size of classes in our primary schools.

I think the wet area is too far away from other areas. The wet area, where the children paint, only accommodates 10 children: this means it is hard to supervise your class and the wet area at the same time.

The wet area is not big enough. We've got one on each side of our teaching space. I would prefer one big one instead of the two smaller ones.

The wet area could be better planned: there are great expanses of brick wall that could easily have extra pin-up board on them.

I would recommend table space in the activities area. I would like to see more movable tables in this area rather than benches facing a brick wall. I don't like the activity area being used as a thoroughfare because the children's work tends to be disturbed.

I think that in the wet areas there could be a better type of lino tile or a better surface polish on the floor.

Blackboards

The blackboards should be positioned so they can be seen by all children from both classes.

The blackboards are a bit of a difficulty. We have the roller type, and being short, I can't always reach them where I want to. They are very narrow and I found that children sitting at the side of the class have trouble in seeing them from where their desks were positioned.

In some of the rooms the blackboards are so small that using them is just a waste of time. You can't put any prepared work up because there is just not enough room. The portable blackboards that are provided are also inadequate.

The blackboards in the two end rooms are in a very difficult position. Children have to sit with their backs to the blackboard so that we can fit all the children in. There is not enough blackboard space. With Grade 1 children sitting side on to the board I find they tend to reverse letters: this is a major problem in this grade.

The thing that I dislike about this classroom is the blackboards. They're so low that you've got to kneel on the ground to get a full blackboard of work in. You can only use about one third of the blackboard with comfort.

Doors

I'd like the toilets to be much more open. Teachers have very little control once the main door is shut. I would like the facilities for children to wash themselves located outside the toilet area.

The 'huff core' doors are an encumbrance: they are too heavy and bulky for female teachers to move around. We prefer the concertina doors.

I think I would insist on metal door frames and far stronger wooden sections of the building, particularly around doorways and windows, than have been put in this school.

I'd like to see locks on the doors.

In two rooms there is no door out to the wet area and children have to sit in a draught because of the lack of space.

Doors and other things like this tend to break down very easily.

Room Dividers

The fixed walls should be replaced by sliding or concertina doors. Instead of having each class tucked away in corners, both classes could be made into one large class.

The movable or concertina doors that separate some rooms, should be soundproofed. Also the two end rooms should be closed off from the wet area to prevent the draught in which the children will be sitting.

I'm in a room which has room dividers that blow open with only a puff of wind. Projects blow down, papers blow across the floor; these things upset me no end.

Positioning of Toilets

This building has internal toilets with no outside access to them. It would be much better if the children could use the toilets without having to come in and out of the classroom area.

The positioning of the toilets in this school is a very bad feature. To get to the toilets the children must actually come into the building. When this occurs during the recess and lunch times it creates many problems, including stealing. These problems could be eliminated if the toilet doors were accessible from outside the building. Furthermore with the present arrangement, the smell from the toilets permeates into the teaching areas.

Amount of Window Space

I think there should be less glass, particularly at the bottom of the walls: I think this is an area that could well be filled in. At the moment the tinted glass which is used cuts out light but it does not appear to cut out heat. If this area was filled in it would probably keep the building a lot cooler.

Extra shading should be provided for the walls, especially the tinted glass walls on the western side. In this school one of the rooms with tinted glass walls has a large white cement area to the west of it and the reflection off this into the classroom is quite considerable.

There is far too much glass in these schools. The rooms get stinking hot in the summer time and the bottom panels of glass are a hazard, especially in the infant section. Little kids will run around the brick paths even though they are told not to: I suppose at one stage we had one small child breaking a glass panel each week.

Lighting

The lights have to be on all day; I don't think it is good for kids to be working under artificial light all day, or for teachers either. The children also tell me there is some reflection off the blackboard at times and they find it difficult to see, especially those at the sides.

Throughout this school I have found it necessary to have artificial lighting on all through the year: I would prefer natural light. It is just more pleasant to be teaching, especially in summer time, by natural light.

Noise

The disadvantage of this type of school, especially where there is no dividing wall between classes, is that you cannot possibly keep control of one class if the other class is doing drill, or any other noisy subject. It is difficult to let kids go when they need to express themselves without disturbing another class.

These classrooms, in some way, do teach children to work on their own, but the children are often distracted and not sure which teacher they should be listening to. Grade 1 children particularly are looking around the corner to see what is on the other teacher's blackboard. If there is any noise coming from the adjoining classroom, and from your own, it is difficult to pin point exactly where its origins are.

You just can't make even the slightest noise without it going through to the other classes. It took me a long time to get used to this. It doesn't particularly worry me that noise comes to me from other classes, but it bothers me more to know that my noise is going through to them. I find myself more intolerant of the children and more worried about the noise going through than I used to be.

The noise is a factor to consider. I have found that once I start motivating a lesson such as written expression, the adjacent class is soon listening to my motivation. This disrupts the work of my own class because I just don't let myself go with other people gawking at me.

The main problem is one of noise. You are not really in control of your own class programme: you must consider the teacher in the other area when conducting your own class activities.

I don't like the noise that comes from both classes. It is very difficult to tell whether it is your own class or the other class which is making the noise. There is a certain amount of drilling to be done in any class and I find this very difficult to do unless I do it at the same time as the other teacher; even so, I just can't keep in perfect unison with the other class. We do drill of course, but it has to be done very softly and as far as little children are concerned, they must be allowed to make a reasonable amount of noise; it just doesn't work with two classes. In addition there are days when one teacher may not be feeling in the best of moods and both teachers find their moods affect each other. This does happen fairly frequently, often enough to worry us, I suppose.

Miscellaneous

There seems to be a dead spot between one area and the next where it is impossible for the child to hear me or for me to hear the child. If I stand opposite the opening that leads into the practical area, my voice is lost completely: it just floats away into the practical area and none of the children hear me at all.

When a mobile trolley is made, it would be convenient if its width was such that it would fit through the doorway.

A resource centre would need to be built with the school at the initial stages with a staff member appointed to be in charge of the resource centre.

Generally I feel the building should be a little more expansive: even the open areas could be larger. I would also like to see not just one, but two television rooms for the six classes to use. Alternatively some other area could be made available for singing, dancing and play-acting.

I would like to see a huge wing, fully carpeted and equipped with furniture, so that teachers, children and parents could use it as a community hall for all sorts of wonderful things.

For assisting teachers who were transferred from an open area school back to a linear school I would like to see two of the linear classrooms made into one classroom with a partition wall put in.

I would like to keep the wing system so that two teachers can work together as a pair. I think the wing system is tremendous, and yet I would also like to be able to flow freely, as we do here, into the practical area or out of doors.

I would like to see lino or lino tiles rather than carpet in the entrance of each cluster because of the amount of traffic this area gets.

The desks that have the trays are a complete schommozell: kids can't fit anything in them. Then of course there are the cubby holes: these won't even take an art portfolio and they finish up on the floor and the place looks continually untidy.

I think my greatest dislike of this school, although it is a new school, has been the lack of equipment. I feel it is essential in this situation that equipment be provided: there must be sufficient tape recorders and overhead projectors in every room, and masses of laboratories of all descriptions. I am having to make up my own equipment: I don't object to this, but I cannot produce as effective a teaching aid as can be purchased. This lack of equipment holds me back because if I don't have the equipment I cannot teach the children or work with children in small groups. I have to work with larger groups because there is just not enough material to go around.

I suggest all the furniture be taken out and replaced with stackable furniture. There should be as much mobile furniture as possible: little mobile trays and trolleys and other things as we have here. Nothing should be fixed or built in. Every second wall should be knocked out so that two-room classrooms could exist. Doors should be put in on each side so that children have access to playgrounds from either side.

B. WHAT CHANGES WOULD YOU MAKE TO A STANDARD-TYPE-LINEAR-SCHOOL?

I would like to see the decor changed to something nice and bright instead of those awful brown colours and those ugly floor boards. I would change the furniture to something light and flexible that can be easily moved. If I want to have a drama lesson it should only take three minutes to move all the desks and chairs and have the whole area open. Perhaps some of the walls could be partially knocked down in between classrooms to avoid going along a corridor to enter another area: there would be a much freer movement of children especially when changing subjects.

If I was in a traditional school I think I would like a door between classrooms, say three or four classrooms together where one room could be used as an art and crafts room, one as an activity room, one as a quiet working room and perhaps one as a television room. There must be some provision made for the movement of the children between the classrooms rather than having to go outside to move in.

The only way I can see it develop could be by the placement of a door on the opposite side of the normal corridor so that in suitable weather children could work straight outside the classroom within sight of the teacher in that situation.

I would definitely have laminex type furniture which is kept clean and good looking always. I would have carpets on the floor, a store room, big cupboards which would take any type of book, more blackboard space and more pin-up boards.

I would knock down a few walls in between rooms and put in concertina doors, open the outside areas to an outside resource area and perhaps add a few big rooms for maths and art resource areas.

External access on to a lawn area and improvements in the way of plumbing by the addition of sinks in a number of classrooms, perhaps every classroom.

I would ask the architects to spend more time considering the elements, particularly wind. Ideally, I think the best design is for the buildings to be arranged in the form of a square or rectangle surrounding a big open area. This area could be lawned or partly bitumenised for games: it would be very sheltered for outdoor games.

C. WOULD YOU LIKE TO SEE THIS SCHOOL MORE OPEN OR LESS OPEN?

More Open

I would like this school to be more open, but without the co-operation of the other teachers this cannot possibly happen: the teachers then have to get together in their own areas and work out their own open system of teaching. I am quite happy where I am.

I'd like to see it more open, but it comes down to some specific things. We were talking yesterday about creative dance and music and we would like to, of course, have a very good sound system with various types of taped or recorded music where we can give the kids the freedom to really express themselves: but we're so tied here because on both sides of us we have conventional teachers who can't stand noise. Possibly, we could make it more open by having in the cluster, teachers who were relatively compatible. Certainly if there were six teachers, none of whom objected to working noise, class noise, or to movement, then we wouldn't feel inhibited in putting on activities. It's all part of a process: as it is now we close our two doors, but they're only concertina doors and this makes it awkward.

In areas of social studies, music and general subjects I'd like to see it more open.

I would like to see it more open, perhaps not in the skill subjects so much as in the social studies, health education, physical education, music and art areas where you can take advantage of a teacher's strength. With three Grade 1's, I feel the need for cross setting and sending weaker children to one area so that one teacher has a smaller number of weaker children and another teacher can have a larger number of medium children, and so on.

Status Quo

Generally speaking I would like to see the cluster school remain as it is. I think as far as the architecture goes, a number of the existing rooms could have concertina type walls so that we would get a little more flexibility: we don't have this in all the rooms at the moment.

I would like to see this school about the same as it is. I don't think I would change anything greatly apart from adding movable walls into each pair of classrooms. I am still too traditional and I don't fancy having three, four, five or six classrooms all open to one another with teachers trying to teach in this situation. Possibly my ideas will change, but I feel a cluster school with quiet areas is ideal, and this is as far as I would like to see the design go.

In our particular school I think we are almost as open as we could be. We do have folding walls between our main class areas. These walls are practically never closed except on the days when we have visiting religious instructors. I cannot think, especially this year, of any period when these doors have been closed between two teachers who are operating as a pair with two areas of children between. Neither have they been closed between these two teachers and the next two. The building is truly open. Every pair of teachers operate with a double lot of children, on a cross-set, co-operative, team teaching basis. This appears to be working very satisfactorily this year. The children move between two areas almost as if they were one. They move out into the adjacent activity areas at the times when they are rostered to do so. The teachers are co-operating with one another, particularly within a grade area, and we do have four areas of children to each of grades 1 and 2. I would feel that full use is being made of the open building in the open sort of way as we interpret it.

I would like to see every room in this school with the concertina wall. I would like each room to be cut off just for the periods when there is a lot of oral response from the children.

Very much as it is, except that I feel that each room should have the concertina doors between them for the sake of any teacher who wants to be able to shut it if she likes, or if one section of children wish to do some certain thing, they too can shut themselves off if necessary.

At this stage the answer would be no: I would not like to see it more open, or less open. We are endeavouring to open our school, but I feel that at this stage the children are not ready for this. They are not able to work quietly in small groups; they are not able to handle the equipment in a small group situation without wanting to make quite a deal of noise. We have noticed a great difference between the senior grades and between last year's Grade 1's and this year's Grade 1's. The present Grade 1's are able to work on their

own: I have gone into the areas and looked around for the teacher expecting her to be there, but she wasn't; the kiddies were just working on as if she was there. Now to me this showed that the children need to grow up through the schoo to be able to work in the open situation. As the years go by the school may become more flexible.

Less Open

Well as it is now it gives great scope, but there are certain areas that I think should be shut off, although not completely. I think every teacher should be able to talk and hold her children's attention all the time; I feel that the two middle areas of the school, areas three and four, are badly geared to this. When the school first started I was in area four and I found great difficulty in getting every child in a situation where they could hear me. If I spoke in a normal voice, phonics and auditory discriminations, which are very important in Grade 1, were very hard to cope with. I found children couldn't hear and copy sounds that I made, and in the initial phonics I couldn't tell from four or five feet away whether they were actually making the correct sound. Areas one and six, while having good vision of adjacent areas are much better geared to this situation and I would like to see a change in area three and four if possible so that more effective teaching can be done in those areas.

I'd like to see it less open. I'd like to be able to close my classroom so that I wouldn't be able to disturb anyone else: at the moment I can't. There is only one room where I can go, and that is the withdrawal room. At the moment I think the plan is just a little bit too open. I believe the cluster idea is the best one of all: this is the ideal school.

From a discipline point of view, I'd like to see it less open. I feel the children are too unrestricted: they seem to roam about, get lost, go to the toilet, and hide in all sorts of little corners. I think a closer check should be kept on what these children are doing when they are supposed to be changing from lesson to lesson.

For the initial teaching of the skill subjects, I'd like to see it less open. In teaching Grade 1 it is very difficult to get control in an open area, particularly in the early stages of the year.

As far as methods are concerned, I would wish to see a more open, flexible type of teaching, but in order to do this the areas of teaching have to be closed.

I would definitely like to see it less open. Mainly because I think the open-area theory, which I don't think I've really seen carried out, only works with very small numbers and with very well trained children, both at home as well as at school: this just doesn't happen here. We are over-crowded in numbers, the children are particularly poorly trained at home, and have a very unfortunate background. There just is not enough self discipline within those children for this Utopian kind of idea to work. It would work if you had 15 children in a classroom perhaps, and 15 in a class nearby, but we've got numbers where if you combine two classes you have 80 children.

If I was teaching in it: less open. I don't think I could keep up with marking and finding out what children actually knew. I don't think I'd be happy with having people just wandering all around under my feet. I like to be with a group and working with them. I'd feel sort of out of the place and lost.

I think that ideally I would like to see it as a more open school, but we would need a lot more equipment and a lot more information on how it was supposed to work.

At the present time I would like to see this school less open than it is now. I am basing this on the fact that it is not a moving population but a growing population: more and more children are coming in. There is no provision for the increasing numbers: they are just being piled in and we are all squashed like sardines. I also feel the children themselves have no training in how they should work in an open area school: children must have a sense of responsibility. There is a tremendous amount of destruction of school and other children's property. My own particular class made stone age weapons and we stupidly left them on display in our classroom. When we came back after lunch every single one of them had been destroyed. I have left projects the children have done on display along the side of the classroom and leader pages have been missing or have been scribbled on. Things are pulled down off walls: if you leave anything anywhere you cannot rely on it being there after the first or second recess period.

There has also been an instance of a child sitting on top of a television set during a lesson. This is the type of behaviour that is accepted by some teachers from these children. You have really got to make an effort: you have to fight them the whole time to get any sense of order from them. If a bag is dropped on the ground where the bags hang up, they won't pick it up but will just kick it somewhere. One of my own children had his lunch thrown in the toilets. On one day I saw a girl walking out of the area and suddenly, for no apparent reason, she decided to kick open the boys' toilet door. Unfortunately a boy was coming out of the toilet at the same time; he received the full face of the door. For these reasons I would like to see the school less open until the children become more responsible, more sensible and more considerate.

D. CONCLUSIONS

1. Implications that may be drawn from these comments focus most clearly upon the question of the degree of architectural openness. These teachers have clearly expressed a desire for greater flexibility within the open area unit. It seems from their comments that the advancement of open education will depend upon teachers being able to exercise options in the mode of organisation they employ within their school. Therefore provision must be made for an effective partial closure, because some teachers described educational advantages which might follow. Conversely, easy and fluid access for children to the communal facilities within the school is equally vital, as is the option of two teachers combining their teaching spaces and integrating their programmes at points of mutual benefit. This latter option, favoured by many of the teachers in this survey, implies a preference for two-teacher spaces but with ready access to such areas as the wet areas or withdrawal room. Concertina dividers would enable adequate closure within each teaching space when this was desired. Consideration should be given to these being sound proofed.

2. A clear need emerges for an external assembly, learning and play area to be included in the initial design and construction of new schools. Whether an entirely separate structure, or incorporated as a covered courtyard, this facility would essentially be open rather than completely closed, but with adequate all year round protection from the weather.

3. The inadequacy of ventilation within the new schools was mentioned so frequently that any new design which failed to remedy this problem would be itself inadequate. The most

pressing need is for ventilation of centrally located rooms such as withdrawal rooms. The impossibility of having windows open during windy days also needs to be overcome. Further attention needs to be given to the amount and position of glass within the design from both the safety as well as the ventilation aspects. A number of teachers clearly pointed out the benefit of higher ceilings but this would be only a partial solution. The ultimate solution may be air conditioning.

4. The so-called "wet areas" are presently unsatisfactory on at least three counts. Their use as a thoroughfare effectively prohibits the full realisation of their potential benefit. It was considered that planning them to accommodate only ten children was also to limit their usefulness. Attention should be given to the inclusion of more pin-up space and work tables within these areas.

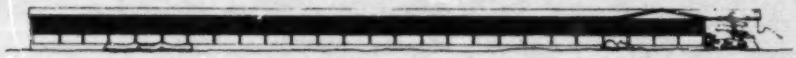
5. A number of teachers commented about the frustration of being unable to adequately store their professional possessions in the vicinity of their class area. The development of professional competency by teachers is partially dependent upon provision for their needs as well as the needs of the children. Some attention should be paid to the comments of teachers about this question.

22

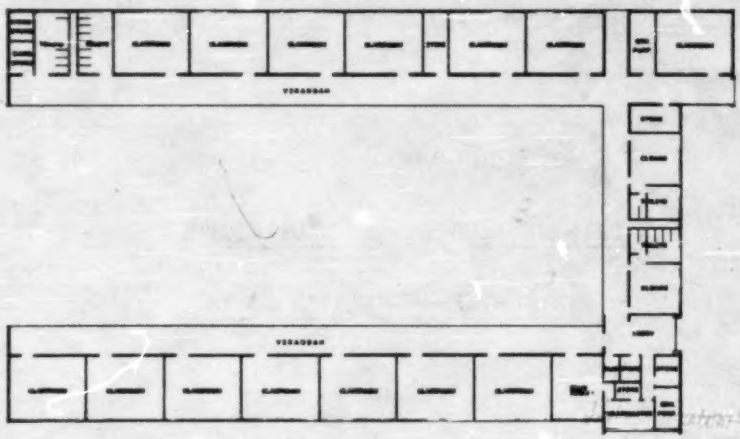
PRIMARY SCHOOL DESIGN DEVELOPMENTS IN WESTERN AUSTRALIA TO 1972

As the following plans will indicate, there has been a gradual opening up of the interior of school buildings and the provision of specialised learning areas to facilitate less formal teaching practices.

The Pre 1968 Design



ELEVATION



FLOOR PLAN

Figure 1.

Basically built along the "finger plan" concept, this design was wasteful in terms of usable floor space, required a level site and was costly because it was constructed using substantial materials and labour.

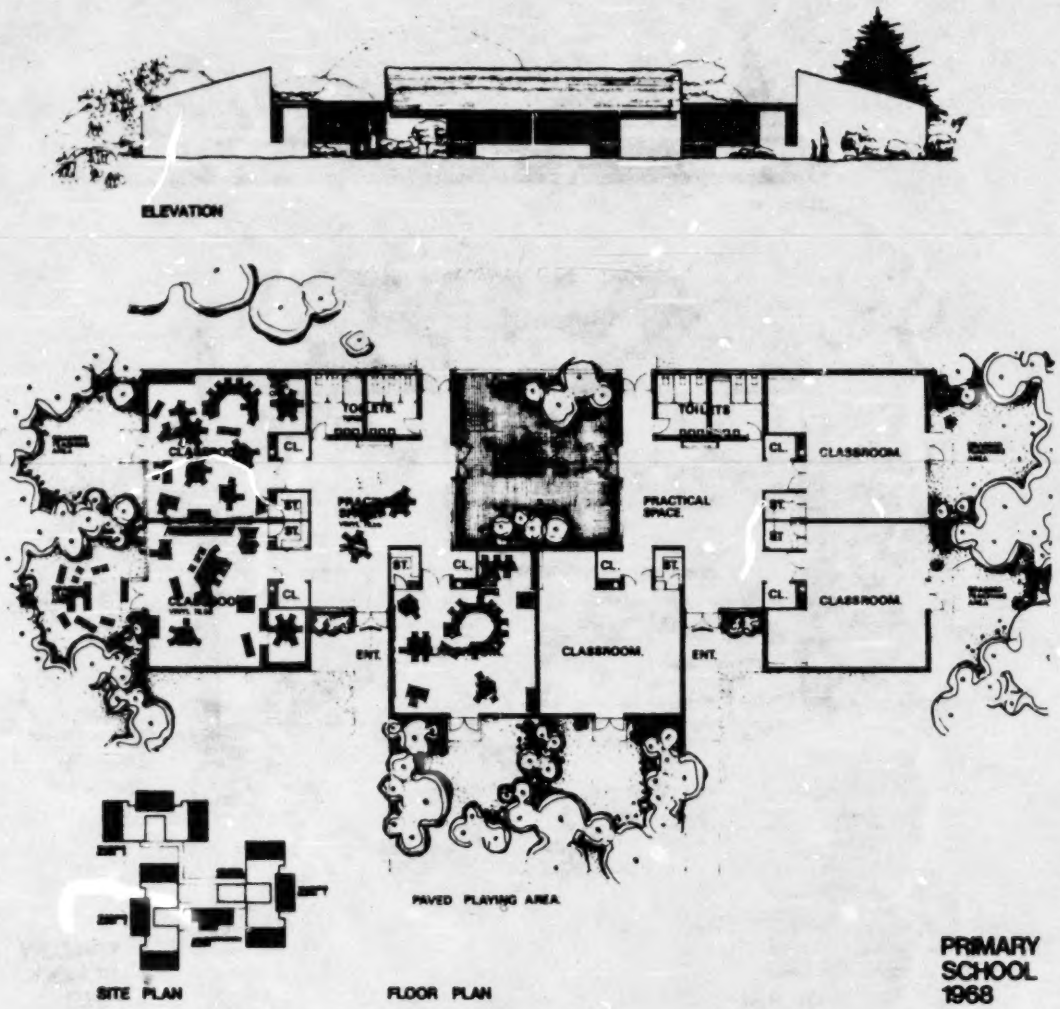


Figure 2.

By completely changing the school design, it was possible to introduce considerable building economies and to provide an educational environment more appropriate to the needs of modern educational trends. In brief, floor space was maximised, and specialised learning areas - the practical space, the paved courtyard, the quiet areas and direct access to external grassed areas - were introduced.

A modified form of this design had movable doors between two classrooms to facilitate co-operative teaching practices.

The 1969 Design

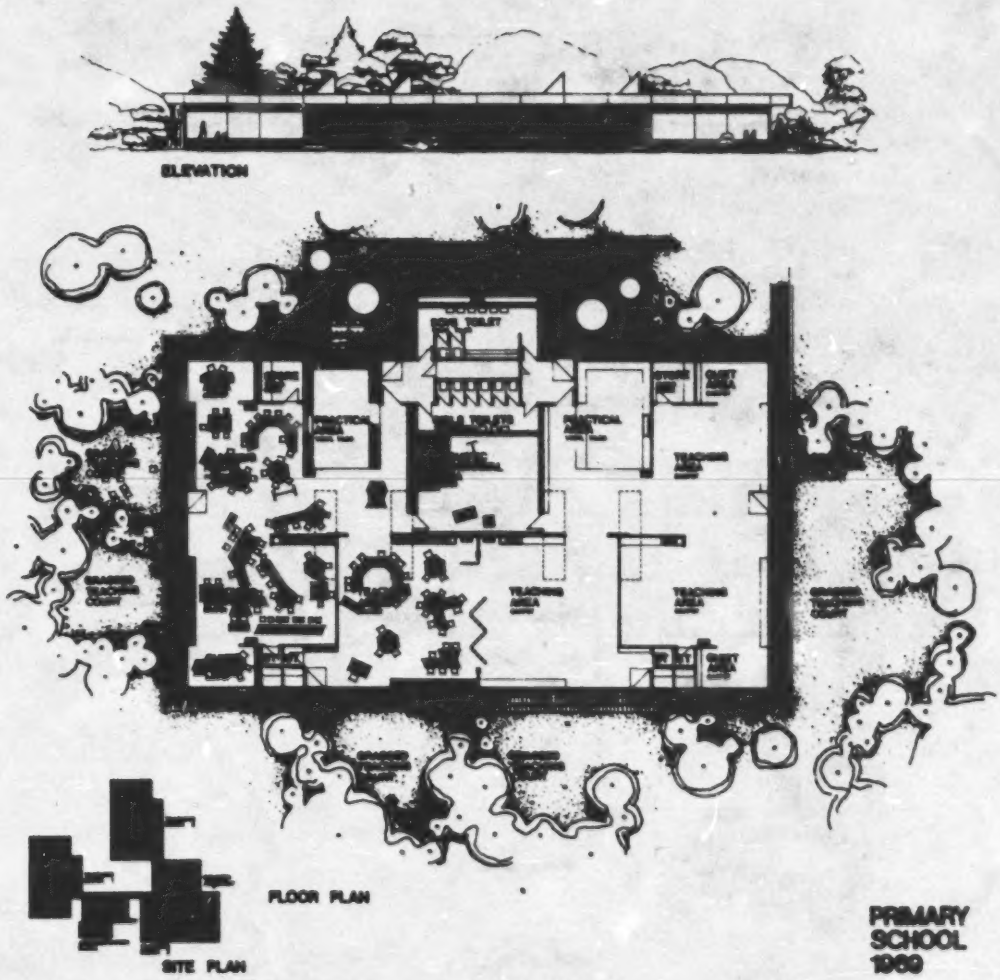


Figure 3.

This design was a more compact version of the cluster style. In addition, carpeted floors and acoustic ceilings were provided to lessen noise; ceilings were lowered to eight feet throughout, and the withdrawal area was to cater for noisy or audio-visual activities.

The open doorways between adjoining areas were to provide for co-operative or team teaching practices.

The 1970 Design - the first open school.

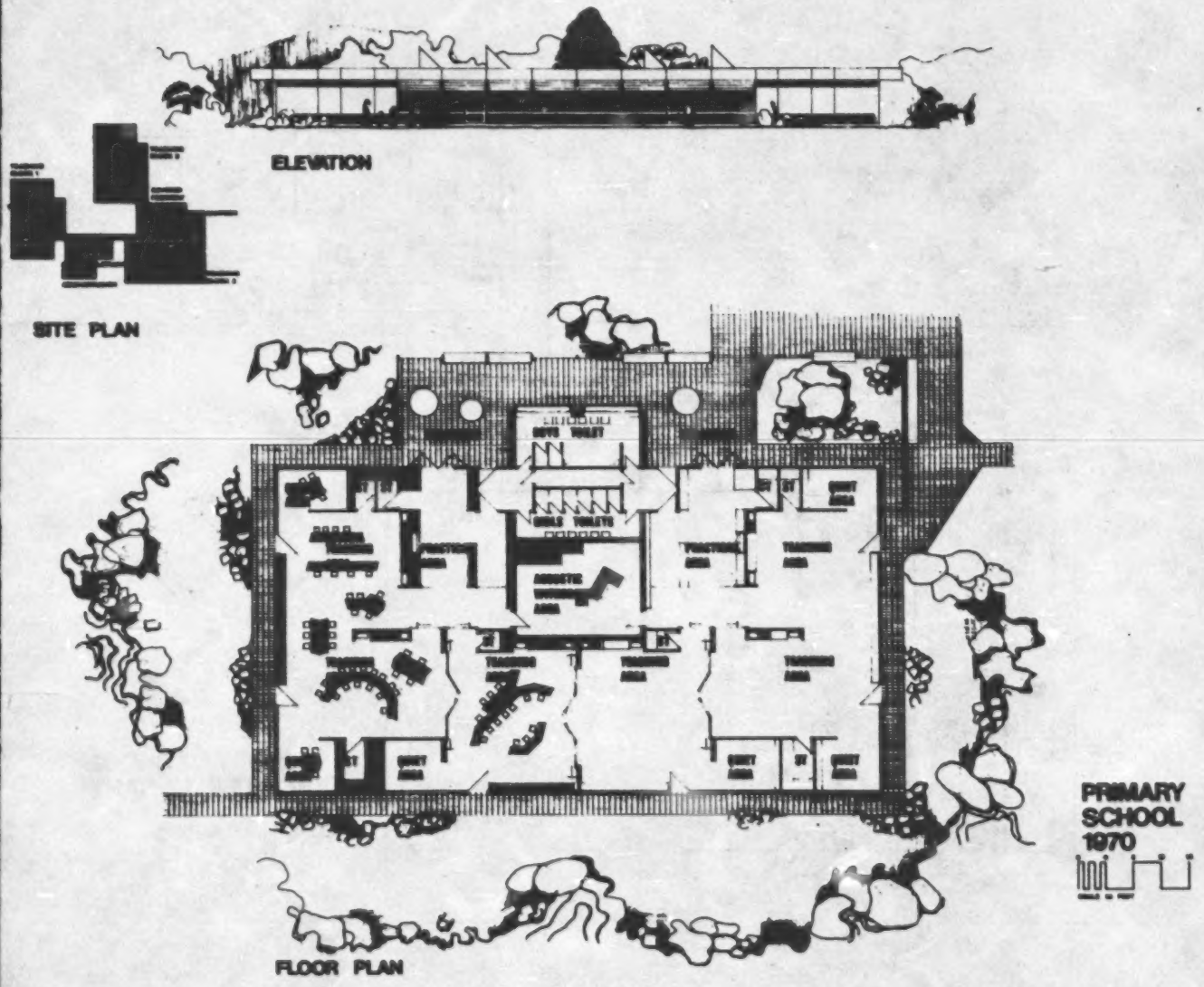


Figure 4.

The most significant change in this design was the removal of the internal walls so that the folding doors could be opened providing for unimpeded movement throughout the whole building.

The 1972 Design - a totally open school.

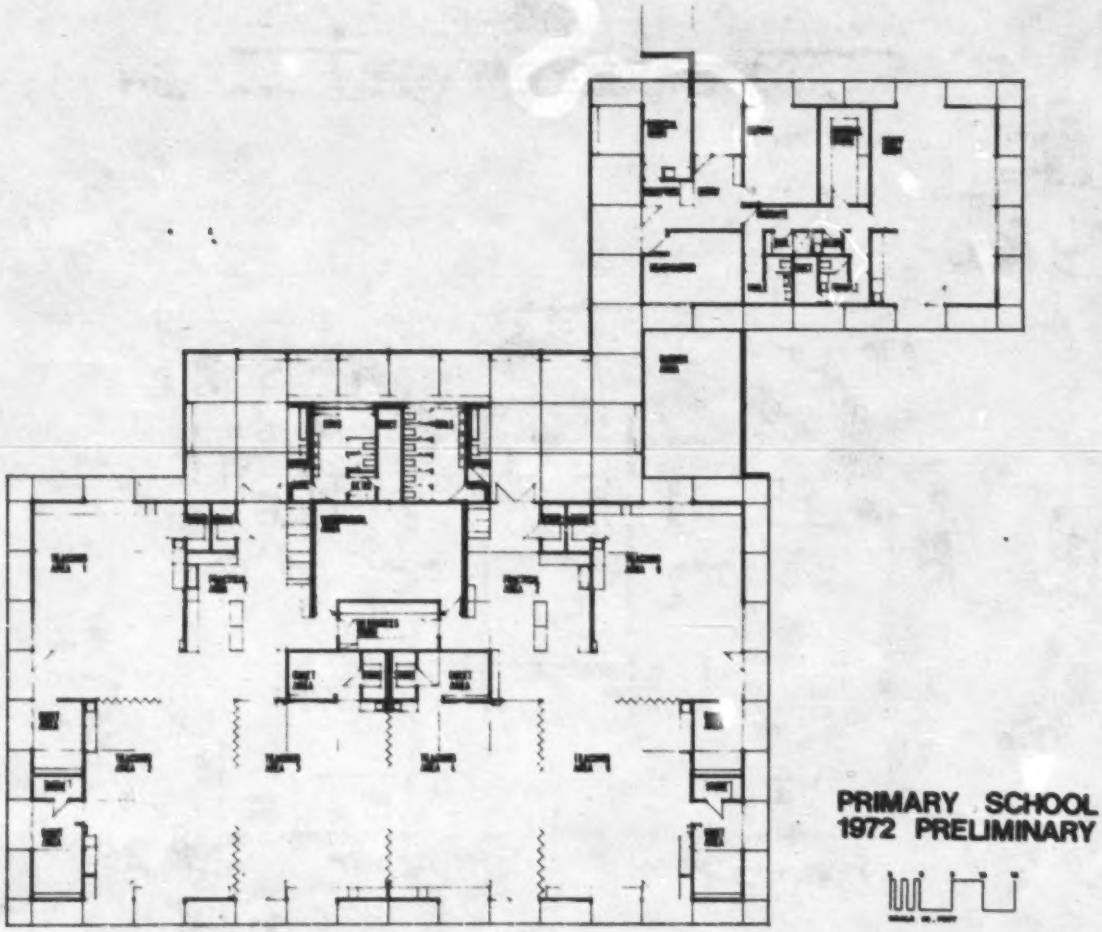


Figure 5.

The final phase in the development of open plan schools was achieved by the removal of most of the quiet areas and associated stores to the perimeter of the building and by providing concertina doors between teaching areas. In addition, toilets which were originally internal, were now completely external, and a resources store was placed adjacent to the withdrawal area.